

Storm Water

Custodian: The Corporation of the District of Saanich, Underground Services Division

Publish Date: January 1, 2003

Abstract: The storm water dataset represents a collection of features that receive surface runoff into the storm water collection system.

Purpose: The storm water dataset is captured to support the management, planning, and maintenance of storm drain assets.

Status: Complete

Update Frequency: Weekly

Credits: The Corporation of the District of Saanich, Engineering Department, Public Works Division, Storm and Wastewater Section, Corporate GIS.

Coordinate System: NAD 1983 CSRS UTM Zone 10N (WKID: 3157)

Geometry Type: Point & Line

The 10 Data Layers comprising Stormwater are:

1. Storm Abandoned Line
2. Storm Abandoned Point
3. Storm Catch Basin
4. Storm Cleanout
5. Storm Connection
6. Storm Fitting
7. Storm Gravity Main
8. Storm Lateral
9. Storm Manhole
10. Storm Network Structure

1. Storm Abandoned Line

Abstract: An abandoned storm line is a decommissioned pipe that no longer participates in the storm water network. The abandoned line remains in the ground with the disconnected ends being capped. Types captured include: Gravity Main (Collector, Culvert, Box Culvert), Lateral (Standard, Lead, Wye).

Geometry Type: Line

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	37
LINETYPE	Type of abandoned line	Gravity Main (Collector, Culvert, Box Culvert, Lateral (Standard, Lead, Wye)
CROSSECTIONTYPE	Cross section shape of pipe.	Circular, Arch, Box
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	DGM006642
MATERIAL	Pipe material type	Non Reinforced Concrete
DIAMETER	Pipe diameter in millimetres	250
SHAPE	Feature geometry	Line
SHAPE.LEN	Length of pipe in metres	6

2. Storm Abandoned Point

Abstract: The abandoned storm point is a decommissioned device that formerly transported, stored or analyzed water through the storm water network. Abandoned points are comprised of an extensive classification of former junction points including: Catch Basin (CB, Silt Trap, Oil Interceptor), Cleanout (Main, Lateral), Connection (Standard, Inspection, Cap), Fitting (Junction, Main Cap, Reducer), Manhole, Network Structure (Pump Station)

Geometry Type: Point

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	10
POINTTYPE	Type of abandoned junction point.	Manhole, Fitting (Main Cap)
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	DMH007166
SHAPE	Feature geometry	Point

3. Storm Catch Basin

Abstract: A catch basin is a chamber or well used to receive surface runoff into the collection system. Catch basins remove water runoff from roadways and allow debris and solids to settle out of the water prior to the water entering the storm mains. Catch basins may also be modeled as curb inlets or storm water inlets. There are two types captured: Catch Basin and Silt Trap.

Geometry Type: Point

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	146
SUBTYPE	Type of catch basin	Catch Basin, Silt Trap
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	DCB016073
SHAPE	Feature geometry	Point

4. Storm Cleanout

Abstract: A storm cleanout provides an access to the storm collection system for the purpose of inserting cleaning tools, such as rods or snakes while cleaning a pipeline or cleaning a blockage. A cleanout is generally found at the upstream end of a storm gravity main. Cleanouts are sometimes found on laterals near property line. There are two types captured: Main and Lateral.

Geometry Type: Point

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
SUBTYPE	Type of cleanout	Main, Lateral
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	DCT000817
SHAPE	Feature geometry	Point

5. Storm Connection

Abstract: A storm connection represents the point location where Saanich's storm collection system meets the customer's storm water line. These representative points are most commonly located at the property line or right of way boundaries. There are three types captured: Standard, Inspection, and Capped.

Geometry Type: Point

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
SUBTYPE	Type of connection	Standard, Inspection, Cap
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	DCN002912
DEPTHM	Recorded ground to connection depth in metres	2.3
SHAPE	Feature geometry	Point

6. Storm Fitting

Abstract: A storm fitting represents the device used to cap storm main lines.

Geometry Type: Point

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
SUBTYPE	Type of fitting	Main Cap
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	DFG003537
SHAPE	Feature geometry	Point

7. Storm Gravity Main

Abstract: A storm gravity main is a type of pipe that is not pressurized and relies on gravity to move the storm water through the main. There are three types captured: Collector, Culvert, and Box Culvert.

Geometry Type: Line

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
SUBTYPE	Type of gravity main	Collector, Culvert, Box Culvert
CROSSSECTIONSHAPE	Cross section shape of pipe	Circular, Arch, Box
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	DGM006980
MATERIAL	Pipe material type	Poly Vinyl Chloride
DIAMETER	Pipe diameter in millimetres	200
HORIZONTALMEASUREMENT	Horizontal measurement of pipe (typically box culvert) in millimetres	1800
VERTICALMEASUREMENT	Vertical measurement of pipe (typically box culvert) in millimetres	1200
RELINED	Pipe has been relined	Yes or No
RELINEMETHOD	Construction method used for pipe relining	Pipe Bursting, Cured in Place
RELINESTRUCTURAL	Relined pipe has had significant reconstruction	Yes or No
HOSTMATERIAL	Material type for host pipe	Non Reinforced Concrete
LINERTHICKNESS	Thickness of liner in millimetres	16
SHAPE	Feature geometry	Line
SHAPE.LEN	Length of pipe in metres	523

8. Storm Lateral

Abstract: A storm lateral is a small-diameter pipe that runs from the gravity main line to the customer premises, catch basin, or silt trap. There are three types captured: Standard, Catch Basin Lead, and Wye. The pipe diameter is predominantly assumed to be 100 mm.

Geometry Type: Line

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
SUBTYPE	Type of lateral	Standard, Lead, Wye
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	DLL034268
MATERIAL	Pipe material type	Poly Vinyl Chloride
DIAMETER	Pipe diameter in millimetres	100
SHAPE	Feature geometry	Line
SHAPE.LEN	Length of pipe lateral in metres	22.3

9. Storm Manhole

Abstract: A storm manhole is an entry point that allows access for operators or equipment to enter a storm water collection system. It may also be called an access or maintenance hole. There are five types captured: Standard, Dead end, Drop, Sump, Substandard, and Box.

Geometry Type: Point

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
MANHOLETYPE	Type of manhole	Standard, Box
CONSTRUCTIONTYPE	Manhole construction type	Concrete, Wood
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	DMH008078
SHAPE	Feature geometry	Point

10. Storm Network Structure

Abstract: A storm network structure is used to convey water through the storm water collection system in non-gravity scenarios and operating structures. There is one type captured: Pump Station.

Geometry Type: Point

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
SUBTYPE	Type of network structure	Pump Station
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	DNS000001
PUMPSTATIONNAME	Pump Station Name	Killarney
SHAPE	Feature geometry	Point